

COMPLETE LISTING OF ALL CLAIMS IN THE APPLICATION

Claim 1. (Canceled)

Claim 2. (Currently Amended) An isolated DNA molecule encoding [said] a polypeptide comprising the amino acid sequence as shown in SEQ ID NO:2 [of claim 1].

Claim 3. (Original) The isolated DNA molecule of claim 2, wherein said isolated DNA molecule is a cDNA molecule.

Claim 4. (Original) The cDNA molecule of claim 3, comprising the nucleotide sequence shown in SEQ ID NO:13.

Claim 5. (Original) The cDNA molecule of claim 3, comprising nucleotides 105 to 242 of the nucleotide sequence shown in SEQ ID NO:13.

Claim 6. (Currently Amended) A recombinant, double-stranded DNA molecule, comprising operatively linked in the 5' to 3' direction:

a) a promoter that functions in plant cells to cause the production of an RNA sequence;

b) a structural coding sequence that encodes said isolated polypeptide of claim [1] 2; and

c) a 3' non-translated region that functions in plant cells to cause transcriptional termination and the addition of polyadenylate nucleotides to the 3' end of said RNA sequence.

Claim 7. (Original) The DNA molecule of claim 6, wherein said structural coding sequence is a cDNA molecule.

Claim 8. (Original) The DNA molecule of claim 7, wherein said cDNA molecule comprises a member selected from the group consisting of the nucleotide sequence shown in SEQ ID NO:13, and nucleotides 105 to 242 of the nucleotide sequence shown in SEQ ID NO:13.

Claim 9. (Original) The DNA molecule of Claim 6, wherein said promoter is selected from the group consisting of the FMV 35S promoter, the CaMV 35S promoter, the ssRUBISCO promoter, the EIF-4A promoter, the LTP promoter, the actin promoter, and the ubiquitin promoter.

Claim 10 - 13 (Canceled)

Claim 14. (Currently Amended) [The method of claim 10] A method of controlling fungal damage to a plant, comprising providing to the locus of said plant the polypeptide as set forth in SEQ ID NO:2, wherein said polypeptide is provided to said plant locus by expressing DNA encoding said polypeptide within cells of said plant.

Claim 15. (Canceled)

Claim 16. (Currently Amended) A method of controlling fungal damage to a plant, comprising the steps of:

a) inserting into the genome of a plant cell a recombinant, double-stranded DNA molecule comprising:

(i) a promoter that functions in plant cells to cause the production of an RNA sequence;

(ii) a structural coding sequence that encodes said isolated polypeptide of claim [1] 2;

(iii) a 3' non-translated region that functions in said plant cells to cause transcriptional termination and the addition of polyadenylate nucleotides to the 3' end of said RNA sequence;

b) obtaining transformed plant cells; and

c) regenerating from said transformed plant cells a genetically transformed plant, cells of which express an antifungal effective amount of said polypeptide [of claim 1].

Claim 17. (Original) The method of claim 16, wherein said structural coding sequence is a member selected from the group consisting of the nucleotide sequence shown in SEQ ID NO:13, and nucleotides 105 to 242 of the nucleotide sequence shown in SEQ ID NO:13.

Claim 18. (Original) The method of claim 16, wherein said promoter is selected from the group consisting of the FMV 35S promoter, the CaMV 35S promoter, the ssRUBISCO promoter, the EIF-4A promoter, the LTP promoter, the actin promoter, and the ubiquitin promoter.

Claim 19. (Currently Amended) A plant, cells of which contain an antifungal effective amount of said polypeptide of claim [1] 2.

Claim 20. (Original) The plant of claim 19, wherein said plant is produced by a method comprising the steps of:

a) inserting into the genome of a plant cell a recombinant, double-stranded DNA molecule comprising:

(i) a promoter that functions in plant cells to cause the production of an RNA sequence;

(ii) a structural coding sequence that encodes an isolated polypeptide comprising the amino acid sequence shown in SEQ ID NO:2;

(iii) a 3' non-translated region that functions in said plant cells to cause transcriptional termination and the addition of polyadenylate nucleotides to the 3' end of said RNA sequence;

b) obtaining transformed plant cells; and

c) regenerating from said transformed plant cells a genetically transformed plant, cells of which express an antifungal effective amount of said polypeptide.

Claim 21. (Original) The plant of claim 20, wherein said structural coding sequence is a

member selected from the group consisting of the nucleotide sequence shown in SEQ ID NO:13, and nucleotides 105 to 242 of the nucleotide sequence shown in SEQ ID NO:13.

Claim 22. (Original) The plant of claim 19, the genome of which comprises one or more additional DNA molecules encoding an antifungal peptide, polypeptide, or protein, wherein said one or more additional DNA molecules are expressed and produce an antifungal effective amount of said peptide, polypeptide, or protein encoded thereby.

Claim 23. (Original) The plant of claim 19, the genome of which comprises DNA encoding a *B.t.* endotoxin, wherein said DNA is expressed and produces an anti-insect effective amount of said *B.t.* endotoxin.

Claim 24. (Original) The plant of claim 19, wherein said plant is a member selected from the group consisting of apple, barley, broccoli, cabbage, canola, carrot, citrus, corn, cotton, garlic, oat, onion, an ornamental plant, pea, peanut, pepper, potato, rice, rye, sorghum, soybean, strawberry, sugarbeet, sugarcane, tomato, a vine, and wheat.

Claim 25. (Original) The plant of claim 19, wherein said plant is a potato plant.

Claim 26. (Original) A potato seedpiece produced by said plant of claim 25.

Claim 27 - 28 (Canceled)

New Title

Antifungal Polypeptide AlyAFP From Alyssum and Methods for Controlling Plant Pathogenic Fungi